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## **Give Sustainable Energy for Christmas!**

With only two more weeks left in the Christmas shopping season I thought folks might benefit from some gift ideas to encourage more sustainable living. After all, the definition of sustainable living is “meeting our needs today without compromising the ability of future generations to meet their needs”. So giving a gift that encourages this seems like a worthy theme for Christmas as well as this weeks column of Going Green!

### **For the Energy Nerd**

The Kill-A-Watt meter is a great gift for the energy conservation minded person on your shopping list. It measures the power used by whatever 120 volt appliance you plug into it and costs range from \$16 to \$25. I use several of these when I do home energy audits.

I used one in my own home to see how I might shave down the cost of electricity for my home theater system. It showed that my system uses 80 watts of power when everything's running and a whopping 40 watts when everything's off! My Comcast cable box alone uses 25 of those 40 watts. All of my power comes from the sun, but if this were your home you could save between \$35 and \$117 per year by using a power strip and turning everything off when you're not using it. These savings assume 4 hrs/day usage. The savings vary because of PG&E's tiered rate structure; if your bill runs into the highest tier savings would be \$117; if you don't use more than your baseline allowance it's \$35; otherwise your savings would be somewhere in between).

The Kill-A-Watt will also tell you how much energy that old refrigerator or freezer is using, which will likely encourage you to either unplug it or purchase a new one. Use one to see how much energy you can save by putting your home computer & peripherals on a power strip. There are many appliances in today's average home that add to your PG&E bill when they're not being used, so there are all sorts of uses for this inexpensive little meter. And when you're done with it you can always loan it out to friends or family! Try a google search with the keyword “Kill-A-Watt” or visit your local hardware or energy store to pick one up.

### **For the Health Conscious**

Another possible gift idea is full spectrum fluorescent lighting for the health conscious person on your list. Many years of scientific research have proven that full spectrum light has been shown to reduce symptoms of SAD (Seasonal Affective Disorder), PTSD (Post Traumatic Stress Disorder) and improve health. Studies of school children even found full spectrum lighting improves test scores and reduces absenteeism! I'm not sure which local suppliers carry these so if you can't find them locally try [www.fullspectrumolutions.com](http://www.fullspectrumolutions.com).

### **For the Energy Nazi**

Speaking of fluorescent lighting, do you have an “Energy Nazi” on your gift list (ie, someone who's

always trying to force everyone in the household to save energy to the Nth degree)? If you've replaced a standard 60 watt incandescent lamp with one of those cheap, annoying compact fluorescent lamps (that hum, flicker, and seem to take forever to come up to full brightness) chances are you've been effected by an Energy Nazi. How about giving them the gift of a quiet, instant-on fluorescent lamp? They even come in dimmable versions and in all sizes, shapes and light quality. A company called Purespectrum ([www.purespectrum.com](http://www.purespectrum.com)) carries a full line and I know Amazon.com sells the 20 watt lamps for about \$5 each.

### **For the Forever Chilly Person**

We all have different “internal thermostats”. Some folks, especially the elderly or those with poor circulation, feel chilly when the room is less than 78 degrees! I wrote about radiant electric panel heaters a few issues back here in Going Green in an article titled “Just Say No To Electric Heat” (all past articles are archived here – <http://www.theenergyguy.com/Articles.html>) and mentioned the “Eco-Heater” available at Hills Flat Lumber.

Of all the articles I've written over the years this one won the prize for “most phone calls”. It seems everyone with an electric heater wanted to know if the one they have was the type I was referring to, and apparently there are many such folks that read the column. One woman even got very upset with me when I told her I couldn't talk right then, that I was in the middle of working on a job with one of my employees; she angrily replied “well then why do you put your phone number at the end of your articles?!” Ouch. Fortunately most people appreciate the fact that I'm a working stiff, out there trying to survive like everyone else, and it's not realistic to think I'm their “drop everything and be the public's free, on-call, energy answer man whenever the phone rings” guy! Which reminds me, if you have questions like these please email me as I'm constantly inundated with phone calls every day amidst trying to get work done as it is!

These radiant panel heaters are different from most electric heaters. Think of them as being shaped more like a large LCD flat screen TV than a breadbox. They have a larger surface area (for radiant heat transfer) than typical electric space heaters and no fan. They'll usually have words like flat, panel, and radiant in the name. Here are links to a few I found available online (one is Ace hardware, so ask your local Ace hardware store if they can order for you) -

<http://www.amazon.com/Soleus-Air-HM1-10R-32-Ultra-Thin-Micathermic/dp/B000KLNJAC>

<http://www.amazon.com/Indus-Tool-CL-Flat-Panel-150-Watt-Radiant/dp/B0009HMFPM>

<http://www.acehardwareoutlet.com/productdetails.aspx?sku=6118566&source=GoogleBase>

Here's an article explaining the difference between the common “convection” and less common “radiant” electric heater -

<http://housewares.about.com/lw/Home-Garden/Home-improvement-renovation/Whats-the-Difference-Between-Convection-and-Radiant-Heaters-.htm>

As explained in my earlier article on these, the idea behind these radiant electric panel heaters is to help heat your body, not the room. Heating an entire room with an electric heater is impractically expensive! And as one of the callers on my previous article noted, electric heat is pretty useless during a power outage, so there's another thing to keep in mind!

So happy shopping, dear readers, and I wish you all a very happy holiday season and a more sustainable new year!

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*efficiency and solar services for residential and commercial buildings, from comparing the alternatives through installation and servicing of energy systems of all types. You can reach him at 530-273-4422, via email [RayDarby@SustainableEnergyGroup.com](mailto:RayDarby@SustainableEnergyGroup.com), or visit their web site at [www.SustainableEnergyGroup.com](http://www.SustainableEnergyGroup.com).*